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(54) Title: PROCESS FOR THE PREPARATION OF 1-OCTENE

(57) Abstract: Process in two steps for the preparation of 1-octene starting from butadiene which comprises: a first step (a) in which the bis-hydrodimerization of butadiene to 1,7-octadiene is effected in the presence of a catalyst based on a palladium complex containing one or more tri-substituted monodentate phosphines, in an aprotic polar solvent optionally containing an organic base; a second step (b) in which the partial catalytic hydrogenation of 1,7-octadiene to 1-octene is effected, the above process being characterized in that: (i) in the first step the aprotic polar solvent is selected from disubstituted cyclic ureas; (ii) in the second step the catalyst is selected from non supported ruthenium complexes having general formula (I I): RuX_mL_n (I I).



